Tuesday, 06/11/2007 7:14:10 AM Date Linda Lacelle User **Process Sheet** Drawing Name Customer : CU-DAR001 Dart Helicopters Services : 350 SKIDTUBE EXTRUSION (BENT) Job Number : 35527 **Estimate Number** : 10997 :NIA P.O. Number Part Number : D26003BENT S.O. No. : NA : 06/11/2007 This Issue **Drawing Number** - D2600 D1/D2750 D Prsht Rev. : NC : N/A **Project Number** MA : MACHINED PARTS First Issue Type **Drawing Revision** : 32448 **Previous Run** Material **Due Date** : 13/11/2007 Qty: Written By Checked & Approved By Comment B02.11.28 ΚJ : Est. Reformat **Additional Product** Job Number: Machine Or Operation: Seq. #: Description: 1.0 D26003120 Extrusion Round 3" 350 Comment: Qty.: 1.0000 Each(s)/Unit 30.0000 Each(s) Total: **Extrusion Bent** Pick: Qty Part Number Description 1 D2600-3 B30687 Extrusion 2.0 BENDING Comment: BENDING MACHINE Deburr one end of extrusion Drill #30 pilot holes using DT8689 Open holes to 5/16" and deburn Bend using CNC bending machine as per program 2750.C and Folio FT003. Use 5/16 locator pin on buggy "A". Check fit to Jig DT8150 3.0 QC5

INSPECT WORK TO CURRENT STEP

Comment: INSPECT WORK TO CURRENT STEP

Inspect work to Step 6Ensure fit to Jig DT8150

PACKAGING 1 4.0

PACKAGING RESOURCE #

Comment: PACKAGING RESOURCE #1 Stock and Stock Location:

40

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W /O:		WORK ORDER CHANGES			•		
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #: Fault Category: N	CR: Yes	No DQA		Date: ①	7/1/09

					QA: N/0	C Closed:	_ Date: _					
NCR:	,		WORK ORDER NON-CONFORMANCE (NCR)									
		Description of NC		Corrective Action Section B		Verification	A	Approval QC Inspector				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng					
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NOTE: Date & initial all entries

Date:

•Tuesday, 06/11/2007 7:14:10 AM Linda Lacelle

User:

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE EXTRUSION (BENT)

Job Number: 35527

Part Number: D26003BENT

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

DA11/09

Job Completion



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W/O:			WC	ORK ORDER CHANGES					
DATE	STEP	PR	PROCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Cate	gory: N	CR: Yes	No DQA:		Date:	
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NCR:			WORK ORDI	ER NON-CONFORMANC	E (NC	₹)			
DATE	STEP	Description of NC		Corrective Action Section B		Verifica	tion	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Section		Chief Eng	QC Inspector
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NOTE: Date & initial all entries



DESIGN	PH	DRAWN BY	DART AEROSPACE USA, INC. PORT HADLOCK, WA				
CHECK	ED PH	APPROVED	DRAWING NO. D2750	REV. E SHEET 1 OF 5			
DATE	07.0)5.17	350 SKIDTUBE ASSEMBLY	, SCALE NTS			
REV		DATE	DESCRIPTION				



DATE		TITLE	SCALE			
	07.05.17	350 SKIDTUBE ASSEMBLY	NTS			
REV	DATE	DESCRIPTION				
Α	98.04.16	NEW ISSUE				
В	98.09.01	CHANGE MS24694-S293 TO AN8-16A				
С	98.11.18	ADD D2750-3 / D2750-4; INCORPORATE D2738 AND D2740				
D	06.01.05	ADD HOLES AND SPACERS FOR APICAL INCORPORATE DEO 9133 / 9157	FLOATS			
E	07.05.17	CHANGE TO STAINLESS STEEL WEARPL ADD RUBBER GASKETS; CHANGE INSEF ADD D3631-1; REMOVE QTY(38) NAS1515 REMOVE QTY(10) NAS1515H8L; REMOVE D2741, QTY(2) AN960C816; REMOVE QTY(2) MS21083C8	RTS;			

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
Х				D2750-041	SKIDTUBE ASSEMBLY, LH
	Х			D2750-042	SKIDTUBE ASSEMBLY, RH
		Х		D2750-043	SKIDTUBE ASSEMBLY, LH
			Х	D2750-044	SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-13	WEARSHOE
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3535-35	WEARSHOE
1	1	1	1	D3536-13	GASKET
1	1	1	1	D3536-25	GASKET
1	1	1	1	D3536-35	GASKET
5	5	5	5	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
42	42	42	42	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
2	2	2	2	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER
2	2	2	2	NAS1515H8L	WASHER
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W/O:		WORK ORDER CHANGE	S				
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #: Fault Category:	NCR: Yes	No DO	Δ.	Date:	

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC		Corrective Action Section B		Verification	Approval Chief Eng	Approval QC Inspector		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C				
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NOTE: Date & initial all entries



DESIGN PH	DRAWN BY B	DART AEROSPACE USA, INC. PORT HADLOCK, WA				
CHECKED PH	APPROVED	DRAWING NO. D2750	REV. E SHEET 2 OF 5			
DATE 07.0	5.17	350 SKIDTUBE ASSEMBLY	SCALE NTS			

GENERAL NOTES:



- 1. ALL DIMENSIONS ARE IN INCHES.
- 2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 4. DAMAGE TOLERANCE ON BENDING:

THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.15 ± 0.030 IN THE BENT PORTION OF THE TUBE

- 5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS C-C. D-D AND F-F.
- 6. WELDING TO BE DONE PER DART QSI 004.
- 7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:

MINIMUM YIELD TENSILE STRENGTH = 35 ksi MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi

8. FINISH:

ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.

POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).

- 9. INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'F' SIZE HOLES (Ø0.297) FOR WEARSHOE INSERTS.
- 10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3C5A/AN3C7A WEARSHOE BOLTS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
- 11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.





